Claims:

- 1. The use of an oligonucleotide probe comprising exon 15 of the BRAF gene or a part thereof comprising codon 599 or the counterstrands thereto for the detection of the malignancy of melanoma cells.
- 2. The use of an oligonucleotide probe according to claim 1 wherein an oligonucleotide comprising the sequence Seq. ID No. 1 or an oligonucleotide comprising a sequence complementary to Seq ID No. 1 or a part of said sequences comprising codon 599 or an allelic variant thereof is used for the detection of the malignancy of melanoma cells.
- 3. The use of an oligonucleotide probe according to claim 1 or 2 wherein codon 599 is bearing a mutation.
- 4. The use of an oligonucleotide probe according to claim 1 or 2 wherein an codon 599 codes for an amino acid selected from the group consisting of valine (Val, V), glutamic acid (Glu, E) and aspartic acid (Asp, D)
- 5. The use of an oligonucleotide probe according to any one of claims 1 to 4 wherein said oligonucleotide comprises a sequence according to Seq. ID No. 5 or Seq. ID No. 6 or a sequence complementary to Seq. ID No. 5 or Seq. ID No. 6 or a sequence with an homology of over 80% to said sequences.
- 6. A method for the detection of the malignancy of melanoma cells wherein the presence of a mutation in codon 599 in exon 15 of the BRAF gene or a part thereof comprinsing codon 599 is determined.
- 7. A method according to claim 6 wherein the presence of a mutation in codon 599 leading to a replacement of valine (wildtyp) into glutamic acid (Glu, E) or aspartic acid (Asp, D) is determined.

- 8. A method according to claim 6 or 7 wherein the detection of a mutation in codon 599 is carried out by sequencing of exon 15 of the BRAF gene or a part thereof comprising codon 599 or by hybridising exon 15 oligonucleotide of the BRAF gene or a part thereof comprising codon 599 with a reporter oligonucleotide with a sequence complementary to the exon 15 sequence of the BRAF gene or a part thereof.
- 9. The use of reporter oligonucleotides comprising a sequence Seq. ID No. 5 or Seq. ID No. 6 or a sequence with an homology of over 80% to Seq. ID No. 5 or Seq. ID No. 6 or a sequence complementary to said sequences for the determination of the malignancy of melanoma cells.
- 10. Labelled reporter oligonucleotides comprising a sequence Seq. ID No. 5 or Seq. ID No. 6 or a sequence with an homology of over 80% to Seq. ID No. 5 or Seq. ID No. 6 or a sequence complementary to said sequences.